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ABSTRACT

In order to "cut through the jargon of the multifaceted field of evaluative research", 21 evaluation models representing a range of possibilities were identified (via literature review) and compared in terms of purpose and five basic phases applicable to rural development. Evaluation was defined as "the systematic examination of a program in operation for the purpose of improvement", and rural development was identified as encompassing programs directed at reducing rural/urban disparities via planned change. Attempting to utilize a common framework or sequence of phases, each model was compared via the following base phases: (1) Program Descriptions (description of goals, objectives, operation, environment, etc.); (2) Criteria Formulation (critical program areas identified and performance standards established); (3) Evidence Gathering (data collected for each of the specified evaluative criteria, instruments constructed, and appropriate statistical analyses made); (4) Judgment Making (judgment of criteria against data to determine program performance as minimum, expected, or exceptional); (5) Dissemination (summative and formative evaluations utilized by program operators and/or others). The implications for rural development were identified in terms of facilitating program change, improvement, monitoring, and/or justification. (JC)

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"ALTERNATIVE MODES OF EVALUATION AND THEIR APPLICATION TO RURAL DEVELOPMENT"*

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"ALTERNATIVE MODES OF EVALUATION AND THEIR APPLICATION

TO RURAL DEVELOPMENT

Evaluation research, as an emerging discipline, has not had much time to solidify its theory, methods, and techniques. Legislative pressures have been placed on social action programs (Hammill, 1975). As part of the "boom-town" atmosphere surrounding evaluative research, there has been a great influx of ideas as to how evaluation is to be accomplished. These processual models are from each of the many disciplines which lay claim to evaluative research. What seems to have been needed for a time now is a synthesis and comparison of the various types of models used in conducting evaluations. This paper is a direct attempt to cut through the jargon of the multifaceted field of evaluative research.

INTRODUCTION TO EVALUATION AND RURAL DEVELOPMENT

A DEFINITION OF EVALUATION

For the purposes of this paper, evaluation may be defined as: the systematic examination of a program in operation for the purpose of improvement. This process takes the form of assessing the program in terms of its stated goals and objectives. Such evaluative information is then used in order to make decisions concerning program improvement. There are four key elements to this definition of evaluation.

The first of these key elements is that systematic examination in evaluation implies a process. This means that the collection of steps used in the evaluation of a program have a logical sequence. Such a step-by-step configuration can insure a better evaluation accomplishment.

The next key element which needs to be stressed is the concept of a program in operation. Although this particular idea may reflect the authors' biases toward ongoing or built-in program evaluation, it is believed that this constitutes a critical element for evaluative research. When evaluation is an integral part of any program, there is a greater probability of examining the programs' stated goals and objectives than when the evaluation is done in a post hoc sense.

A third key element to this definition of evaluation is the direct orientation to decision-making mechanisms. Evaluation data should be used in order to facilitate decision-making for program improvement. However, this particular definition most definitely leaves open the option for the evaluator to participate in program improvement decisions or recommendations. Nevertheless, programming decisions must be made as befitting the role of evaluative research.

A fourth, and final element of this definition of evaluation is that of program improvement. As alluded to above, program improvement through decisions is an integral part of evaluative research. It is the special province of evaluative research to yield objective information for program modification decisions. There does, however, seem to be a dicotomy between evaluation for improvement and evaluation for justification. This issue will be dealt with at another point in this paper.

A NON-DEFINITION OF RURAL DEVELOPMENT

There is a definite problem having to do with the defining of rural development. While many people seem to know what it is, the problem arises when they try to set it down in definition form. For the purposes of this paper, it would then seem logical to assume a "common knowledge" definition of rural development. Hence, no formal defining of rural development will be set down in this paper. However, there are certain characteristics of "rural development" which could be considered in any such definition. By way of trying to draw some boundries around the concept of rural development, the following continuums are offered: from facilities and services-building to people-building; from economic factors to social factors; from governmentally imposed programs to local self-help projects, and the list could go on. Basically, rural development is predicated on a recognized judgement that there are differences and/or disparities between rural and urban sectors. Rural development encompasses programs which are directed at reducing such disparities through planned change.

EVALUATION MODELS

Evaluation, like any other developing discipline, has adopted a particular jargon. Because evaluation is such a relatively new discipline, numerous "models" of evaluation exist. Each model is advocated by a particular group and such models represent the particular perspectives and biases of that group. The term, model, is somewhat of a misnomer. Steele (1974) uses the terms models, frameworks, and approaches to evaluation interchangibly. A more accurate descriptor than evaluation models might be evaluation processes. Each "model" is really a description of a process whereby to evaluate a program.

Tables 1 and 2 provide a comparison of some 21 models of evaluation. Although not exhaustive, the models selected for inclusion are representative of the range of possible model alternatives. Included in the description of the evaluation process is a definition or perspective of evaluation, along with a set of dimensions or steps to use in examining the performance of a program. In Table 1, information is provided about the perspective of evaluation adopted by each model. In Table 2, each model is compared to a sequence of base phases. A brief description of these base phases is provided later in this paper. Although this comparison is an approximation at best, it is hoped that, as such, it will provide a useful beginning for a comparative examination of these models.

While the base phases set up for this paper are represented as being in linear sequence, the models which are presented in this manner may not necessarily be "flat". Cycles and dimensionality were represented where possible. Overall, however, this representation has as its purpose the laying out of process.

BASE PHASE CONCEPT

In reviewing the evaluation literature, it was apparent that most evaluation models could be best understood through the utilization of a common framework or sequence of phases. Each of the models has developed a particular

Table 1 - Comparison of Purposes of Evaluation Models *

Author	Purpose
Allerhand (1971)	To provide a research-oriented, case study approach to evaluation in order to increase the effectiveness of action programs.
Alkin (1969)	To report to program decision-makers evidence useful in selecting among alternatives.
Benedict (1973)	To establish broad procedures for the conducting of the evaluation.
Edwards, Guttentag, and Snapper (1975)	To provide research-based information to program decision-makers about possible programming alternatives.
Fairweather (1967)	To provide a method of evaluation which compares alternative strategies of social innovation while keeping individuals at the forefront.
Gronlund (1965)	To provide a systematic process for the determination of the extent to which already specified program goals are achieved.
Hammond (1971)	To determine whether innovation is effective in achieving expressed objectives.
Henderson and Bond (1966)	To collect data, make measurements, specify implications and draw conclusions in relation to established program objectives and evaluative criteria.
Knox (1969)	To improve educational programs through aiding judgments as to its effectiveness based on evidence.
Leinhardt (1975)	To provide a strategy for internal evaluation which would include the gathering of data from multi-disciplinary sources in a coordinated evaluative effort.

* It should be noted that in the preparation of Tables 1 and 2, the information presented is the interpretation of this paper's two authors.

Table 1 - Continued

Author	Purpose
Moe (1974)	To determine or measure the quantity of activities, programs, events, inputs, outputs, impact and to judge the value or worth of what has been done or what has resulted.
Provus (1971)	To determine performance of program relative to standard in order to make decisions on whether to improve, maintain or terminate a program.
Riecken (1972)	To measure desirable and undesirable consequences of an action intended to advance some goal valued by the actor.
Scriven (1967)	To establish and justify merit or worth or program according to priorities identified during needs assessment.
Stake (1967)	To describe and judge educational programs based on a formal inquiry process
Steele (1970)	To provide data for decisions about the program in process or for decisions relating to future programming strategies
Stufflebeam (1970)	To provide relevant information to decision-makers regarding program operation.
Suchman (1967)	To determine the degree of success or failure through the judgment of a program of planned change in relation to the desired result.
Tankersley (1974)	To facilitate program adjustments in order to increase present program effectiveness and increase the probability of success for future programs.
United Nations (1962)	To determine the extent to which the program's objectives are being met and to make an overall assessment of the program's socio-economic impact upon rural life.
Weiss (1972)	To provide information for effective program decision-making.

TABLE 2 - BASE PHASE COMPARISON OF 21 EVALUATION MODELS

BASE PHASES / MODEL	Program Description Phase I	Evaluative Criteria Formulation Phase II	Evidence Gathering Phase III	Judgment-Making Phase IV	Dissemination Phase V
Allerhand (1971)	Assessment of the problem	Establishing basic design; identification and stipulation of the research strategy.	Type of research staff Techniques for data collection	(Base Phase IV not stated)	Reporting of results.
Alkin (1969)	Systems Assessment Program Planning	Program Implementation	Program Improvement	Program Improvement	
Benedict (1973)	Negotiation of the contract Design of the evaluation	Implementation of the evaluation design			
Edwards, Guttentag, and Snapper (1975)	Recognition of a decision problem and definition of its nature and dimensions		Probability evaluation	Outcome evaluation Actual choice among acts	
Fairweather (1971)	Definition Innovation	Comparison	Evaluation		
Gronlund (1965)		General objectives Specific learning outcomes	Evaluation techniques		
Hammond (1971)	Planning	Implementation	Product	Recycling	

Table 2 cont.

BASE PHASES	Program Description Phase	Evaluative Criteria Formulation Phase	Evidence Gathering Phase	Judgment-Making Phase	Dissemination Phase
MODEL	I	II	III	IV	V
Henderson & Bond (1966)		Setting evaluation objectives and criteria	Making objective measurements and processing information	Making objective judgments to supplement objective measurements.	Providing evaluation findings for program decision-making.
Knox (1969)	Program description	Program intents as to inputs, transactions, and outcomes	Observed inputs, transactions, and outcomes	Congruence testing between intents and observed data. Specific judgments	
Leinhardt (1975)			Gathering data from multi-disciplinary sources	Evaluation	
Moe (1974)	Defining the	context of development	Documenting inputs Documenting processes Documenting	Assessing overall impact outputs	
Provus (1971)	Program Design	Evaluation Design 1. Design 2. Implementation 3. Process 4. Product	Data collection	Feedback	
Riecken (1972)		Determining program objectives	Describing operations Measuring effects	Establishing a baseline Controlling extraneous factors Detecting unanticipated consequences	
Scriven (1967)		Needs assessment	Compression	Credentialing	Dissemination

Table 2 cont.

BASE PHASES	Program Description Phase	Evaluative Criteria Formulation Phase	Evidence Gathering Phase	Judgment-Making Phase	Dissemination Phase
MODEL	I	II	III	IV	V
Stake (1967)	Rationale	Description Matrix Intents	Observations	Judgment Matrix	Dissemination
Steele (1970)		Criteria	Evidence	Judgment	
Stufflebeam (1970)	Context Evaluation	Input Evaluation	Process Evaluation	Product Evaluation	
Suchman (1967)	Goal Setting	Program Goal Measuring	Planning Putting program into operation	Assessing the effect of program operation Value Formation	(Recycle)
Tankersley (1974)		Documenting	Arraying evidence	Appraising	
United Nations (1962)	Choice of topics for one year's evaluation	Organization of formal thinking	Prepare questionnaire Field inquiry	Analyze data & prepare report	Dissemination
Weiss (1972)		Finding out the goals of the program Translate goals into measurable indicator	Collect data on indicators from those exposed to the program Collect similar data from control group	Compare data from experimental and control groups in terms of goal criteria.	

jargon and adopted different emphases; however, all share certain characteristics. Consequently, rather than describe each of the models separately, it was thought that a more useful approach for the purposes of this paper would be to describe some common sequence of stages. By adopting this approach, a more general overview of the process of evaluation is obtained.

PHASE I -- PROGRAM DESCRIPTION

The first phase of the base phase concept in evaluation is program description. During this phase, the evaluator with assistance from the program staff, describes the program according to its goals and objectives, operation, and environment. More simply, the evaluator attempts to put down on paper what the program is all about. This serves to direct the evaluator, program staff, and appropriate audiences to the program's primary goals and consequent courses of action. The result of this effort might be considered the program's blueprint. Although, seldom is this process carried to such great detail. Descriptions may be graphic, written, or some combination of both. Often this description might be the program staff's conception of how the program should exist ideally. It then provides a "standard" by which to evaluate the program's actual performance. Generally, Phase I consists of a written description of the program at some level of specificity; it then serves as a documentation of the goals and operations both to program staff and other relevant parties.

PHASE II -- CRITERIA FORMULATION

The next phase serves to focus the evaluation on certain aspects of the program. Obviously, most rural development programs are so complex that it is nearly impossible to examine systematically every aspect of such programs. Consequently, critical areas in the program's operation are identified. These critical areas become the focus of the evaluation. Standards, or acceptable levels of performance must also be developed for each of these criteria. For example, suppose one of the critical evaluative areas for a rural development program concerned the increased use of extension educational services. The program staff would then set for themselves a level of acceptable performance (e.g. use of services would increase 25%). This criterion serves as a standard by which to judge the program's performance. The formulation of evaluation criteria serves two purposes: 1) it focuses the evaluation effort on critical areas and 2) it sets standards of acceptable performance so the program may be evaluated.

PHASE III -- EVIDENCE GATHERING

In the third phase of evaluation, evidence is gathered concerning the performance or operation of the program according to the evaluation criteria formulated and established in Phase II. More simply, data is collected for each of the specified evaluative criteria. Construction of instruments and appropriate statistical analyses of collected data occur during this phase. The evaluation is probably more similar to the traditional research investigation during this phase than during any other phase. The skills and knowledge required of the evaluator are the principles and mechanics of research design, methodology, and analyses.

PHASE IV -- JUDGEMENT-MAKING

The criteria established in Phase II and the evidence (or data) collected during Phase III are used in making decisions regarding the performance of the program in Phase IV. Basically, the data (or actual performance) of the program is compared to the established criteria (or ideal performance) for that program. Obviously, three conditions could exist. The program could fall below a minimum acceptable level of performance, attain expected performance, or exceed projected performance. Decisions regarding the significance or effect of these performance discrepancies would be made. The models probably differ more during this phase than in any other phase. Some models provide for the evaluator simply feeding such information back to the program staff. Others encourage the evaluator to go beyond this feedback role and assist in the decision-making process itself. In all cases some determination of the program's merit is made during this phase.

PHASE V -- DISSEMINATION

The last phase of evaluation is the dissemination of findings. Although very few models explicitly lay down guidelines or procedures for the reporting of evaluation results, it was apparent that this must always occur. Findings are usually reported back to clients. Special contractual arrangements are sometimes made to include wider audiences. The use of the evaluative findings depends upon the status of the program operation. If the program is terminating, the evaluation is viewed as summative and is a documentation of final assessment of the program's performance. This summative information might be used by other similar projects in designing and implementing their own particular programs. If the program is continuing, the evaluation is viewed as formative and as a source of information for program improvement. Appropriate changes can be implemented and evaluated and/or other areas of program operation and performance can be examined.

IMPLICATIONS FOR RURAL DEVELOPMENT

The implications for program evaluation in rural development are numerous. Because the major focus of most evaluation models is to systematically document the operation of the program according to some established criteria, decisions regarding the future operation of the program are facilitated by evaluation efforts. Before decisions can be made regarding program changes, documentation concerning current program activities must be obtained. The reason for such documentation is to provide evidence regarding the faithful installation of the program. If in fact all of the necessary components were not present and the program consequently did not achieve its goals, those components initially bypassed can be implemented and the program reevaluated. On the other hand, if all of the necessary components were present and the program still did not achieve its goals, then systematic changes can be initiated which would allow for program improvement. Evaluation would then be ongoing until the stated program goals were achieved. As a third possibility, if all of the necessary components were present and the program achieved its goals, evaluation becomes a monitoring process to insure continued effective operation.

Another view of evaluation useful to rural development is that of evaluation for the purpose of continued program support. Although realistically, evaluation for such a purpose is valid, the primary focus of this paper is

that of defining evaluation as integral to program improvement. It must be remembered, however, that program improvement and program justification are not mutually exclusive concepts. The same evidence which was gathered for program improvement can also be used for justifying continued program support.

A generalized example of the above for rural development might fall into the realm of the pilot development project. In many cases, the continuation of such pilot projects on a larger scale is dependent upon the demonstration of program effectiveness. The nature of such a pilot project is to act as a proving ground for rural development strategies. Based on the evaluative information obtained from the pilot project, only those strategies which have proven themselves effective at the pilot stage are tested on a larger scale. Consequently, greater probabilities of success are guaranteed. This is especially important when limited resources are available.

CONCLUSION

While this paper has not attempted to take an advocacy position either for the base phase concept of evaluation or for any of the individual models presented herein, it is hoped that the similarities among models was apparent. If it can be possible for those working in the areas of rural development and evaluation to cut through the jargon of the different orientations to evaluation, then meaningful advances can be made for development. Evaluation is then seen as a useful tool for rural development. Not only does it provide for the systematic evaluation of particular rural development programs, but it also allows for the selection of more effective rural development strategies.

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